

US 20160183794A1

(19) United States

(12) Patent Application Publication (14) Gannon et al.

(10) **Pub. No.: US 2016/0183794 A1** (43) **Pub. Date: Jun. 30, 2016**

(54) BODY TEMPERATURE LOGGING PATCH

(71) Applicant: Blue Spark Technologies, Inc.,

Westlake, OH (US)

(72) Inventors: **John Gannon**, Shaker Heights, OH

(US); Matt Ream, Naperville, IL (US); Gary R. Tucholski, North Royalton, OH

(US)

(21) Appl. No.: 14/587,626

(22) Filed: Dec. 31, 2014

Publication Classification

(51) **Int. Cl.**

A61B 5/00 (2006.01) **A61B 5/01** (2006.01) (52) U.S. Cl.

(57) ABSTRACT

An actively-powered temperature data logger patch with wireless data communication includes a sealed, flexible battery comprising a printed electrochemical cell with an anode and a cathode, and a flexible circuit including a microprocessor, a temperature sensor configured to sense a temperature of a target subject, a wireless communication transmitter and an antenna. In one example, the temperature sensor is located at a first end of the patch, and the antenna is located at an opposite, second end of the patch. The patch is configured to conform to a curved surface of the target subject and includes an adhesive configured to be removably applied to skin of the patient. An external computing device is capable of receiving communication from the wireless communication transmitter of the patch via an electromagnetic field.

